

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Highline Exploration, Inc.
Well Name/Number: Buzzetti-Corkins Trust. 52-16
Location: SW SE Section 16 T1S R32E
County: Big Horn, MT; Field (or Wildcat) Toluca

Air Quality

(possible concerns)

Long drilling time : No, 2 to 3 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig, 500 HP, to drill to 805' TD

Possible H2S gas production: None anticipated.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No special concerns – using single rig to drill to 805' TD.

Water Quality

(possible concerns)

Salt/oil based mud: Surface hole will be drilled with freshwater. Air will be used out from under surface casing to total depth.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Peritsa Creek, about 1/8 of a mile to the east and from this location. A stock pond lies within the unnamed ephemeral tributary, about 1.25 miles to the southeast from this location.

Water well contamination: No, water wells within 1 mile of this location. Surface casing will be set at 80'. Drilled with water. Surface casing will be run and cemented to surface from 80'.

Porous/permeable soils: No, sandy bentonitic soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 80' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No cut or fill need. Small single derrick self leveling rig will be used.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 100'X100' location size required. Will be using a self leveling rig, so very little dirt work is required.

Damage to improvements: None, surface use is grassland.

Conflict with existing land use/values: Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☒ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation
- ☐ Other _____

Comments: Will use existing county frontage road and two track trails. A short access road will be built from the two track trail into this location. Drilling fluids and mist fluids will be allowed to dry in the earthen pit. Cutting will be buried in the earthen pits. Pits will be backfilled when dry. No special concern.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest buildings are about 1.5 miles to the southeast and the town of Hardin is 7 miles to the east of this location.

Possibility of H2S: None anticipated.

Size of rig/length of drilling time: Single drilling rig 2 to 3 days drilling time

Mitigation:

- ☐ Proper BOP equipment
- ☐ Topographic sound barriers
- ☐ H2S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☐ Other: Will use a diverter and knife valve instead of a BOP. Due to the low

pressure gas zone anticipated.

Comments: No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: No identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Species identified as threaten or endangered is the Black-footed Ferret. Candidate specie is the Greater Sage Grouse. Proposed specie is the Mountain Plover.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: _____

Comments: Private surface lands. Location is between Interstate 90 and Highway 87 with an existing ranch trail right to this well location. No concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

☐ avoidance (topographic tolerance, location exception)

☐ other agency review (SHPO, DSL, federal agencies)

☐ Other: _____

Comments: On private surface lands. No concerns.

Social/Economic

(possible concerns)

☐ Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns

Remarks or Special Concerns for this site

Well is a Belle Fourche Formation test, within the Toluca Gas Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impact expected, some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki _____

(title:) Chief Field Inspector _____

Date: September 11, 2010 _____

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Big Horn County water wells

(subject discussed)

September 11, 2010

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Big Horn County

(subject discussed)

September 11, 2010

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____